Lower Mississippi River
Sub-basin Committee on Hypoxia

May 31, 2006
Royal Sonesta Hotel, New Orleans, LA

Participants:

Steve Ashby, US Army Corps of Engineers, ERDC
Len Bahr, Louisiana Governor's Office of Coastal Activities
Larry Beran, Industry-Led Solutions
Ben Blaney, US EPA ORD
Ken Brazil, Arkansas Natural Resources Commission
Darrell Brown, US Environmental Protection Agency
Doug Daigle, LMRSBC
Katie Flahive, US Environmental Protection Agency
Jim Fouss, USDA Agricultural Research Service
Richard Ingram, Mississippi Department of Environmental Quality
Martin Locke, USDA ARS Sedimentation Lab
Matt Rota, Gulf Restoration Network
Dugan Sabins, Louisiana Department of Environmental Quality
Stan Skrobialowski, US Geological Survey
Cliff Snyder, Potash & Phosphate Institute
Mike Sullivan, USDA Natural Resources Conservation Service
Ken Teague, US EPA Region 6
Peter Tennant, Ohio River Sanitation Commission
Deetra Washington, Louisiana Governor's Office of Coastal Activities
John Wilson, US Environmental Protection Agency

Agenda

Welcome & Introductions
Updates on Basin/Sub-basin Activities
Discussion of LMR Sub-basin Nutrient Reduction Strategies (Action Plan Item #6)
Assessments – (Underway, Planned, or Needed)
Initiatives – (Underway, Planned, or Needed)
Opportunities by Sector: Agriculture, Municipalities, Point Source/Industrial, Wetlands
Funding for Sub-basin Committee – future outlook

Updates

Cliff Snyder, P&P Institute:

The Potash & Phosphate Institute is working with NRCS on a USDA Conservation Innovation Grant. It involves 6 projects across the US, focusing on corn, soybean, and cotton. Cotton is the focus crop for the Mid-South. Cotton producers will be part of stakeholder teams that discuss BMPs, and disseminate information on these in the region. The Arkansas Association of Conservation Districts identified 6 leading farmers, who will meet with agencies, fertilizer producers, universities, and extension staff to discuss how to increase both profitability and

stewardship, including improving nutrient management. There will be 2 meetings per year, and information will be posted on a website. Along with a dedicated website there will be a booklet on BMPs.
The hope is that farmers will do field monitoring. This is a 3 year project.

Steve Ashby, ERDC/COE:
Two efforts underway from the Corps: 1) general investigation funds for watershed studies in each district, including one study for the middle Mississippi River; 2) a demonstration of modeling capability for nutrient transport in the Mississippi River.

Mike Sullivan, USDA NRCS:
Our annual Natural Resource Inventory has shown a 43% reduction in soil erosion on cropland over the last 20 years. This is reported by basin. The upper Mississippi River and the Missouri River have the most erosion. The second National Ecosystem Restoration Conference is being planned, and is set to be held in Kansas City in April 2007. The Mississippi River Basin will be a focal point.

Ken Brazil, AR NRC:
There are a number of nutrient-related activities in northwest Arkansas, including the Illinois and Arkansas River basins. There are 2 CREP initiatives focused on stream corridor restoration for nutrient buffers.

Len Bahr, La. GOCA:
There are several concurrent meetings with this one (all in New Orleans). The Society of Military Engineers is meeting at the Marriott, the America's Wetland Campaign is presenting a new variation of a coastal plan for Louisiana, and Tulane is holding a conference on Coastal Engineering tomorrow.

We're especially interested in the distributary part of the river system. I'm convinced we haven't really explored the potential in the delta. We need sediments for the coast, so that's not a simple issue. We all need to look at the big picture, at the whole system, rather than local parts only. Levees, marshes, etc. all have implications for nutrients.

Larry Beran, ILS:
The Sub-basin Committee can be a voice for this kind of perspective.

Ken Teague, EPA R6:
There are larger levee planning efforts underway. John Ettinger is representing EPA in those efforts in New Orleans. There are possibilities for reducing nutrient loadings through diversions, but building levees across the coast seems to be the focus. The scale and potential for modification of the coast is enormous. In the CWPPRA program, several diversions are

either being planned or are underway: Bayou Lafourche; the Maurepas Diversion; and a diversion at Violet. Region 6 is working with states on nutrient criteria, including coastal nutrient criteria.

Matt Rota, GRN:
Many NGOs are frustrated at the lack of action on the hypoxia problem. The deadlines on the original plan have all been missed, and the reassessment is resulting in further delay. We're glad to see actions that are being taken, but the delay is a matter of great concern. Gulf Restoration Network is collaborating with watershed groups on nutrient issues, including nutrient criteria and the Farm Bill, so we're all working for the same goals.

Ben Blaney, EPA ORD:
EPA's Research & Development Ecological Program is conducting research activities in the basin, including hypoxia, wetlands restoration in the upper basin, and the EMAP effort. We're considering expanding research in the Miss. River Basin.

Stan Skrobialowski, USGS:
We've been collecting samples at St. Francisville (on the Mississippi) and Melville (on the Atchafalaya), and are doubling our program to include nutrients, trace elements, sediment, and are getting data to provide information and insight on nutrient cycling in the Atchafalaya and the Industrial Corridor on the Mississippi. Other stations are at Morgan City, Wax Lake Outlet, and Belle Chaase.

Larry Beran, ILS:
Some of you know that I've left TIAER, and am working with Industry-Led Solutions. ILS is going through some restructuring as a non-profit organization. A message that's come through loud and clear is that we need to focus on communicating, not just research. Producers' stories to other producers carry a lot of weight. Other areas of focus are micro-watersheds and locally-led watershed efforts. Both of those need to include modeling and monitoring. We're working with Arkansas Farm Bureau on the Illinois River (in Arkansas.) At our last ILS meeting in Alexandria, Virginia, we also discussed trends such as absentee ownership of farmland, which are changing the future picture of agriculture in the U.S.

Richard Ingram, MDEQ/LMRCC:
One of our big changes is that Phil Bass has retired from Miss. DEQ, and is now with the Gulf of Mexico Program. In the post-Katrina situation, we've rearranged our priorities, and have had to focus on regional wastewater and drinking water issues. In the areas of monitoring and assessment, we're working with ERDC and other partners to develop an Index of Biological Inventories for fish for the basin. We had 400 TMDLs for the Yazoo River Basin for 2006. Watershed management continues to be a priority, and 50 agencies and basin teams are

involved in this. We have a 2-year project developing a watershed characterization tool. We're targeting areas for stakeholder meetings.

In the Lower Miss. River Conservation Committee (LMRCC), we think there's a great potential for the EMAP program in the lower Mississippi River. This is a broad-scale monitoring of a large region, collecting water quality samples on a random basis to characterize the condition of water in the region. It takes a probablistic approach, which requires less samples. EMAP covers all aspects of water quality. (There's an EPA site for EMAP on the upper Mississippi.)

Darrell Brown, EPA:
EPA's new stream assessment was released in early May. We're going through the third round of coastal assessment, and are working to develop a standard protocol nationwide, along with modified regional criteria for things like turbidity.

Dugan Sabins, LDEQ:
LDEQ is working with EPA on those efforts. It's an effort that needs to be state-driven, with greater input. At a meeting of the National Academy of Sciences' Committee on the Mississippi River and the Clean Water Act at LSU a couple of weeks ago, we talked about how much of the lower river is un-monitored. We have a good historical database for the lower river, but there's a large area, roughly from Cairo to St. Francisville, that's a gap for monitoring of water quality.

Peter Tennant, ORSANCO:
ORSANCO is heavily involved with EMAP in our basin. It involves a lot of monitoring, since EMAP looks at broad scale status and trends. The Ohio River Sub-basin Committee is meeting the last week in June, and we'll be working on the framework of our nutrient reduction strategy.

John Wilson, EPA:
This would be a good place to mention that part of the larger Reassessment process (for the Hypoxia Action Plan) is the 4th symposium, on nutrient fate and transport in the river, which is in the planning stage.

Katie Flahive, EPA:
EPA is about to roll out a beta test of the effectiveness of agricultural BMPs for release next week. This will be largely based on journal articles, and will be on line.

Darrell Brown, EPA:
EPA is also working with states on criteria and standards. The 303d listing includes 3000 impaired waters in the Mississippi River Basin, 1/3 of them for nutrient-related problems. There is action being taken on these issues. One of the problems with the Action Plan is that

there's no way to measure progress. Chicago and Kansas City EPA are working with USGS to target the 100 highest opportunity watersheds (at the 12-digit HUC code level) for decreasing the flow of nutrients in 2007.

Ken Teague, EPA R6:

Region 6 is working with USGS on Sparrow modeling for our region.

Darrell Brown, EPA:

Region 4 is also looking for funds for this kind of effort.

Discussion of Nutrient Reduction Strategies in Lower Mississippi River Basin

Assessments, Initiatives, Opportunities

Assessments

Underway:

- USDA CEAP – croplan, watersheds, wetlands (specific to LMR)
- EPA/USGS Sparrow modeling
- EMAP – states, federal agencies
- USGS monitoring – NASQAN, Atchafalaya
- MART
  - Point source inventory
  - Summary of nutrient-related ag practices and projects
  - State-led water quality assessments (303d, TMDL)

Planned:

- MMR (Modeling, Monitoring, Research) – Task Force

Initiatives

Underway:

- Lower Mississippi Joint Venture (LMJV)
- Lower Mississippi Alluvial Valley Stakeholder Initiative (USFS)
- Lower Miss. Conservation Committee (LMRCC)
  - Habitat Restoration
  - Resource Assessment
- LACPR
- CWPPRA - WRDA
- Ducks Unlimited, The Nature Conservancy
- Lower Miss. Sub-basin Committee - Focus Watersheds
- Potash & Phosphate Institute - Cotton BMP Initiative
- Green Lands, Blue Waters
- Mississippi-Ohio-Missouri (MOM)
- Gulf Alliance
- McKnight Collaborative
- Ag Drainage Management Task Force (ADMS)
- Industry-Led Solutions

Programs and Projects

ARS (USDA) – Nutrient management, drainage management
NRCS – Strategic Plan
Farm Bureau – MAPP
EPA Strategic Plan
P&P Institute – InfoAg MidSouth

Funding and Future Outlook for Sub-basin Committee

Hypoxia grant to GMPO/EPA (submitted with other Sub-basin Committees) now taken over by Arkansas Natural Resources Commission

Joint funding proposal for Sub-basin Committees and basin states – developed by Sub-basin Committees – this would be presented to delegations in the basin/Task Force states to support